

DERWENT-ACC-NO: 1994-224133
DERWENT-WEEK: 199427
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TITLE: Conical thread joint for drilling string - has relief groove of nipple in its internal surface, and relief groove of coupling in its external surface

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PRIORITY-DATA: 1990SU-4791285 (February 14, 1990)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE
PAGES	MAIN-IPC	
SU 1810472 A1	April 23, 1993	N/A
004	E21B 017/042	

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO
APPL-DATE		
SU 1810472A1	N/A	1990SU-4791285
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INT-CL_(IPC): E21B017/02; E21B017/042

ABSTRACTED-PUB-NO: SU 1810472A

BASIC-ABSTRACT: The joint consists of a nipple (1) and a coupling (2), connected by a conical thread (3). There are relief grooves in the nipple and coupling, consisting of three adjacent sectors, the first (4,9) of which have varying dia., determined by specified equations. The second ones (5,8) are of constant dia., and the third ones (6,7) change in dia. gradually.

The nipple and coupling parts of the joint are screwed to each other at a set torque. When the joint is loaded by forces arising during drilling, the stresses acting on the loops of the thread are distributed

by the relief
grooves of the shape described more uniformly between the
threads. This
reduces the stresses in the weakest cross sections.

USE/ADVANTAGE - For oil and gas industry. The joint has
higher fatigue
strength because of the improved distribution of the load
between the thread
loops. It therefore lasts longer.

CHOSEN-DRAWING: Dwg.1/3

TITLE-TERMS:
CONICAL THREAD JOINT DRILL STRING RELIEF GROOVE NIPPLE
INTERNAL SURFACE RELIEF
GROOVE COUPLE EXTERNAL SURFACE

DERWENT-CLASS: H01 Q49

CPI-CODES: H01-B03C;

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C1994-102908

Non-CPI Secondary Accession Numbers: N1994-176661

